



4-1-05

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THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. 10/828,975 Art Unit: 1645
Applicants: Ren et al. Examiner: Not Yet Assigned
Date Filed: April 21, 2004 Conf. No. Not Yet Assigned
Docket No. 110313.136US2 Cust. No. 23483
Title: Sperm-Specific Cation Channel, CatSper2, and Uses Therefor

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" Service under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Brenda L. Robles

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Commissioner for Patents
P.O. Box 1450
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INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants and their legal representatives hereby make of record on the attached PTO Form-1449 the following publications. Copies of all cited references are enclosed.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b)(3) before the mailing date of a first Office Action on the merits, therefore no fee is due. I hereby state under 37 C.F.R. § 1.97 (e)(1) that certain items of information contained in this Information Disclosure Statement were cited in a communication (copy enclosed) from a foreign patent office on a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

It is respectfully requested that the information above be expressly considered during the prosecution of this application and that the publications be made of record therein and appear among the "References Cited" on any patent to issue therefrom. *In this regard, it is requested that the Examiner initial and return a copy of the enclosed Form PTO-1449 with the next Patent Office Communication.*

This submission does not represent that a search has been made and does not constitute an admission that the listed documents are material to patentability or that the listed documents are prior art. If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

No fees are believed to be due in connection with this matter; however, please charge any fees that might be due to Deposit Account No. 08-0219.

Respectfully submitted,



Lisa N. Geller, Ph.D.

Reg. No. 51,726

Attorney/Agent for Applicants

Date: March 31, 2005

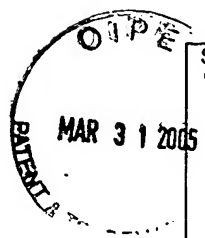
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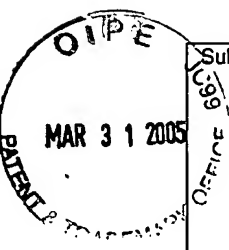
Subt. For, PTO-1449				Docket Number 110313.136US2	Application Number 10/828,975
INFORMATION DISCLOSURE IN AN APPLICATION (Use several sheets if necessary)				Applicant Ren et al.	
				Filing Date April 21, 2004	Group Art Unit 1645
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U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 00/61624	10-19-2000	PCT				
	WO 01/07611 A2	02-01-2001	PCT				
	WO 01/54477 A2	08-02-2001	PCT				
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	WO 03/099865 A1	12-04-2003	PCT				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	A	Arnoult et al., "Activation of mouse sperm T-type Ca2+ channels by adhesion to the egg zona pellucida," Proc. Natl. Acad. Sci. USA, Vol. 93, pp. 13004-13009 (1996)
	B	Bedford, "Mammalian Fertilization Misread? Sperm Penetration of the Eutherian Zona Pellucida Is Unlikely to be a Lytic Event," Biology of Reproduction, Vol. 59, pp. 1275-1287 (1998)
	C	Darszon et al., "Ion Channels in Sperm Physiology," Physiological Reviews, Vol. 79, No. 2, pp. 481-510 (1999)
	D	Database EMBL, May 30, 2000, XP002306734, Database Accession No. AP000586
	E	Database EMBL, March 3, 2000, XP002306735, Database Accession No. AA416682
	F	Database EMBL, March 3, 2000, XP002306736, Database Accession No. AA416577

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G	Database EMBL, December 1, 2001, XP002306737, Database Accession No. Q96P76
H	Database EMBL, October 15, 2001, XP002306738, Database Accession No. AF407333
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J	Database EMBL, October 15, 2001, XP002306740, Database Accession No. AF407332
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M	Database EMBL, 03 March 2000, XP002314900, Database Accession No. AA662668
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S	Database EMBL, 8 October 2001, XP002314906, Database Accession No. BI826910
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V	Database EMBL, 9 May 2001, XP002314909, Database Accession No. BG718245
W	Database EMBL, 29 November 2001, XP002314910, Database Accession No. ABL90376
X	Database EMBL, 29 November 2001, XP002314911, Database Accession No. ABB89967
Y	Database EMBL, 25 March 2004, XP002314912, Database Accession No. ACN41330
Z	Database EMBL, 25 January 2001, XP002314968, Database Accession No. BF934163
AA	Garbers D.L., "Ion channels. Swimming with sperm," Nature, Vol. 413, No. 685, pp. 579, 581-582 (2001)
AB	Hyne et al., "Calcium-dependent increase in adenosine 3', 5'-monophosphate and induction of the acrosome reaction in guinea pig spermatozoa," Proc. Natl. Acad. Sci. USA, Vol. 76, No. 11, pp. 5699-5703 (1979)

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AC	Jungnickel et al., "Trp2 regulates entry of Ca ²⁺ into mouse sperm triggered by egg ZP3," Nature Cell Biology, Vol. 3, pp. 499-502 (2001)
AD	O'Toole et al., "Ca ²⁺ Entry through Store-operated Channels in Mouse Sperm Is Initiated by Egg ZP3 and Drives the Acrosome Reaction," Molecular Biology of the Cell, Vol. 11, pp. 1571-1584, (2000)
AE	Quill et al., "A voltage-gated ion channel expressed specifically in spermatozoa," Proc. Natl. Acad. Sci." Vol. 98, No. 22, 12527-12531
AF	Ren et al., "A Sperm Ion Channel Required for Sperm Motility and Male Fertility," Nature, Vol. 413, No. 6856, October 11, 2001, pp 603-609 (2001)
AG	Santi et al., "A dihydropyridine-sensitive T-type Ca ²⁺ current is the main Ca ²⁺ current carrier in mouse primary spermatocytes," American Journal of Physiology, Vol. 271, pp. C1583-93 (1996)
AH	Serrano et al., "Voltage-dependent Ca ²⁺ channel subunit expression and immunolocalization in mouse spermatogenic cells and sperm," FEBS Letters, 462, pp. 171-176 (1999)
AI	Strausberg R., Homo Sapiens, Clone Image. 03 March 2003, Database NCBI, Accession Number BC047442, pages 1-3
AJ	Tash, "Role of the cAMP, Calcium, and Protein Phosphorylation in Sperm Motility," In: Controls of Sperm Motility: Biological and Clinical Aspects, eds. Gagnon, pp. 229-240 (1990)
AK	Wassarman et al., "A profile of fertilization in mammals," Nature Cell Biology, Vol. 3, E59-E64 (2001)
AL	Wennemuth et al., "Cav2.2 and Cav2.3 (N- and R-type) Ca ²⁺ Channels in Depolarization-evoked Entry of Ca ²⁺ into Mouse Sperm," The Journal of Biological Chemistry, Vol. 275, No. 28, pp. 21210-21217 (2000)
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AO	Wiesner et al., "Cyclic Nucleotide-gated Channels on the Flagellum Control of Ca ²⁺ Entry into Sperm," The Journal of Cell Biology, Vol. 142, No. 2, pp. 473-484 (1998)
AP	Yanigimachi, "Mammalian Fertilization," In: The Physiology of Reproduction, Second Edition, eds. Knobil and Neill, pp. 189-317 (1994)

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